DOCUMENT RESUME

ED 214 816 SO 013 898

AUTHOR Pelow, Randall A.
TITLE Motivational Use of Adaptable Designs in Reinforcing Geographic-Social Studies Content.
PUB DATE 29 Oct 81
NOTE 18p.; Paper presented at the Annual Meeting of the National Council for Geographic Education (Pittsburgh, PA, October 29, 1981).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Class Activities; Concept Teaching; Educational Games; Elementary Secondary Education; *Geography Instruction; Models; Skill Development; *Social Studies; *Teaching Methods

ABSTRACT

The purpose of this paper is to provide teachers with four adaptable designs that can be used to reinforce geographic-social studies knowledge. Adaptable designs are defined as structural formats that can be used repeatedly to teach different concepts and skills. The paper first discusses the advantageous features of adaptable designs and presents several helpful hints for getting maximum usage from them. Each design contains a sample section of how content materials can be applied to it. Much of the content was selected from textbook material and popular units in grades four through eight. The content itself is interchangeable with other examples because of the very nature of adaptable designs. For example, one activity titled "Hot Stuff/Cold Stuff" reinforces information regarding a unit of study on the deserts of the world by allowing students to answer questions placed on die cut cards located toward the center of a matboard. Students move their game markers along spaces around the board's perimeter. This design can be used to review the content for almost any unit of study. The teacher must simply replace the die cut cards with another set of cards on a different topic. In another activity, "Around the World in Words," students classify the meanings of uncommon nouns to their respective categories. The design used in this activity can be used for dictionary work and can be used in conjunction with the textbook. The last two activities presented are "Geoging the Mind" in which students review information related to the meanings of geographic terms and "Mystery Location" in which students identify and locate specific places in the United States with the aid of geographic clues. (Author/RM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED214816

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Randall A. Pelow

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Motivational Use of Adaptable Designs in Reinforcing Geographic-Social Studies Content

Randall A. Pelow
Professor of Elementary Education
Shippensburg State College
Shippensburg, PA

Paper presented at the Joint Meeting of the National and Pennsylvania Councils for Geographic Education and Pennsylvania Council for Social Studies, Pittsburgh, Pennsylvania, October 29, 1981

Teachers are always looking for convenient ideas which will enhance the quality of their teaching. On the basis of many workshops presented to teacher groups on teaching strategies, the most popular segment has been activities which have adaptable designs.

Adaptable designs are structural formats that can be used repeatedly with different concepts/skills. By stripping away the subject matter from the design, one is left with a basic flexible format to which other content material can be applied. Some educators have applied the more melodious, lexical label of "frame games,"[1] although admittedly the designs described in this paper are not all games.

There are a number of advantageous features which make the use of adaptable designs particularly appealing for teachers and students. They are:

1. After more than a decade of experience in teacher training, I have observed that many elementary school teachers underestimate the need for and value of reinforcing knowledge among the content areas, particularly the disciplines of geography, social studies, and science. Use of adaptable designs would represent a rather easy but motivational mechanism by which to increase retention of concepts within these subject areas.

SO 013 898

2. The designs depicted in this article have been very popular with elementary/middle school students. Popularity incites motivation which in turn creates a desire to learn and remember the concepts and skills.

3. Once the design is constructed, you can use it for a variety of activities. It saves in construction time and this promotes greater efficiency.

4. The more activities you can devise for one design, the more economical it becomes. Thus, you get more mileage for your money from one design.

5. Adaptable designs can help to ease classroom storage problems that typically beset teachers. Most adaptable designs can be a flat, two-dimensional style.

6. Once students have engaged in an activity which has an adaptable design, they have familiarity with the directions. You will not need to write new directions or explain how the activity works.

7. Adaptable designs are interdisciplinary in nature. Concepts and skills from all subjects of the school curriculum can be used with these designs.

8. Adaptable designs have the capacity to be multi-graded. That is, some of them can be used in grade 3 or grade 8. Teachers only need adapt the content to a particular design.

9. With slight modifications, these designs work with gifted, slow, and/or average learners.

Here are several helpful hints that will aid you in getting maximum usage from your designs.

1. Insofar as the design permits, think about sketching a design on the reverse side of the board that can be used with another topic of study. By doing this, you get more mileage from the posterboard.

2. It would be a good learning experience for your youngsters to suggest or create some of the questions or statements for the activities. Taking into account developmental variance, some students could make these adaptable designs.

3. Use die cut cards whenever possible. These are three and seven-eighths by two and one-quarter precision cut cards made from sturdy oaktag. These relatively inexpensive, multi-colored cards are packaged 500 to a box and will save you hours of construction time. They may be purchased at office and supply stores or bookstores.

4. One of the most versatile supply items for making a design adaptable is magnet tape. This material is actually a magnet with a rubber coating. It contains an adhesive backing which will stick to all kinds of smooth surfaces, including contact paper. As a cautionary note, remember you are working with a magnet and should arrange the pieces of magnet accordingly.

5. Paper clips, brad fasteners, and velcro are items that can aid in making a design quite adaptable.

The intent of this article is to provide teachers with several successful adaptable designs that can be used to reinforce geographic-social studies knowledge. Each design will have a sample section of how content material can be applied to it. Much of the content was selected from textbook material and popular units in the middle school grades 4 to 8. The content itself is interchangeable with other examples because of the very nature of adaptable designs. Each teacher can bring her own brand of vitality to the ideas by adjusting her curriculum prerogatives to these designs.

Title: GEOGING THE MIND

Comments: The purpose of this activity is to review information related to the meanings of geographic terms. This particular design has been

highly successful. The only complaint lodged against this design was directed from one teacher who stated that the activity was of little value because her children could not read the questions. When it was discovered that the teacher designed the questions, the design itself was vindicated.

This gameboard design is an extremely versatile one because disc sets can be created in conjunction with almost any unit of study at most grade levels.

Sketch:

Description:

1. Sketch the following gameboard design on a 28 X 22 piece of matboard.

2. Draw two-inch diameter circles on an 8½ X 11 piece of construction paper.

3. On each disc, type the desired information.

4. Number each disc to correspond with the numbers on an answer key.

5. To increase durability, laminate the construction paper or cover it with contact paper.

6. Cut out each disc and place the set in an envelope.

7. Make new sets of discs, as desired on appropriate themes, on different colored construction paper. Color-coded discs will not get mixed in with other sets.

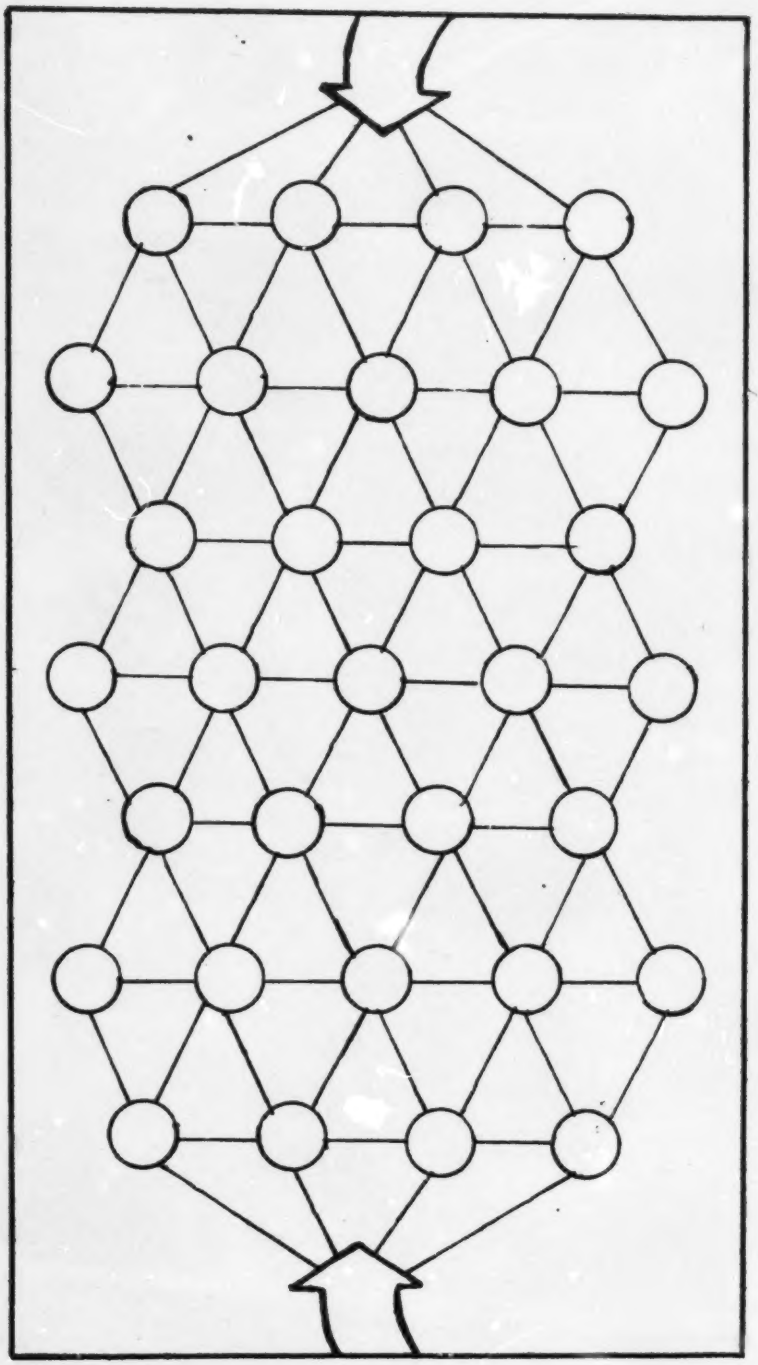
8. The game is played by taking a disc, telling the game monitor the number of the disc, reading the definition, and giving an answer.

9. If the answer is correct, move to that circle and keep the disc. If incorrect, place the disc back on the circle.

10. You are not permitted to skip a circle or to land on a circle that has already been answered correctly.*

11. The first player to reach the opposite arrow wins.

*A variation in these directions would be to have the game monitor place a "new" disc in each circle that is vacated by a player's forward progress. In this way, only two circles would be without questions at any one time.



Sample Discs and Answer Key.

1.	large arm of land reaching into the water and is bordered on three sides by water	peninsula
2.	narrow strip of land connecting two larger land masses	isthmus
3.	narrow, natural body of water connecting two larger bodies of water	strait
4.	group of islands	archipelago
5.	high plateau with steep sides and flat land on its surface	mesa
6.	area of low, wet, spongy land usually with trees	swamp
7.	long, narrow reef or sandbank stretching out from the shoreline	spit

Title: AROUND THE WORLD IN WORDS

Comments: The purpose of this activity is to classify the meanings of uncommon nouns to their respective categories. This design is also great for dictionary work and can be used in conjunction with the textbook.

Sketch:

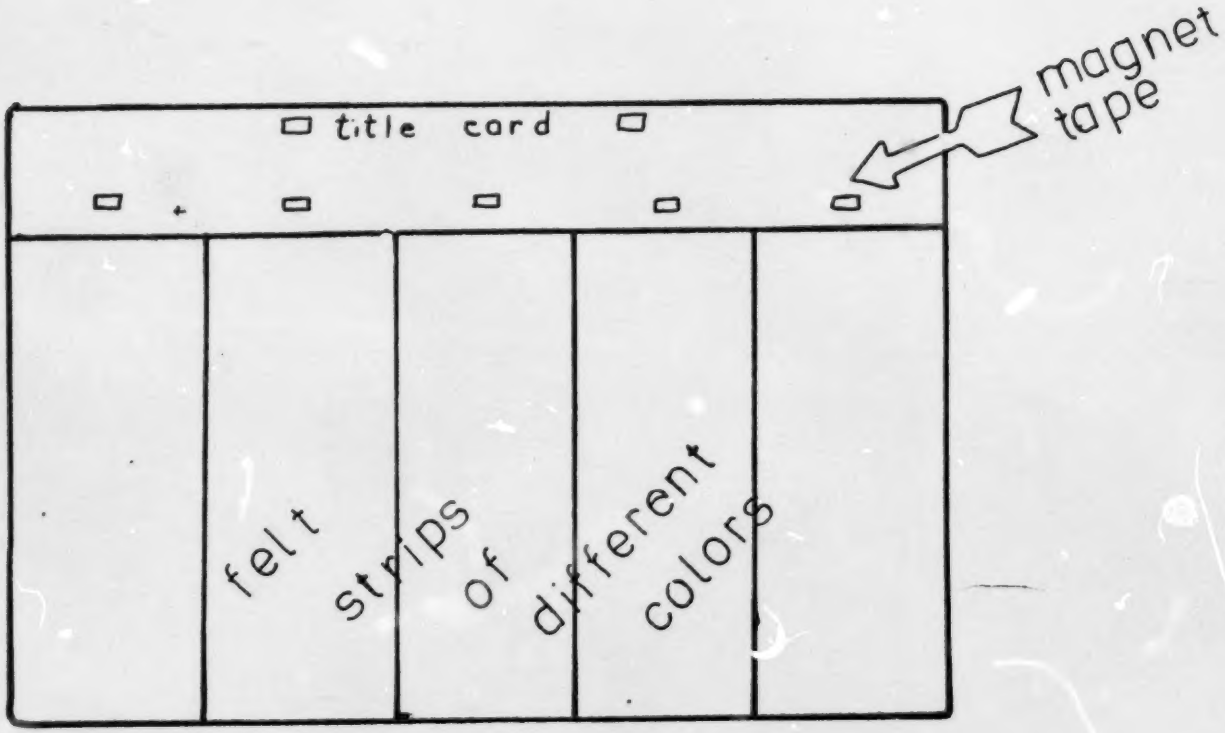
Description:

1. Measure five strips 4" by 10" from different colors of felt and cut out. Glue these strips to a section of oaktag 22" by 14".

2. Make category cards and a title card such as those shown in the design. On the back of each card, place a small piece of magnet tape or a paper clip. Put magnet tape on the oaktag so that it serves as a holder for the title and category cards.

3. Cut 2" discs from oaktag. Write an unusual noun on each disc to correspond to a designated category. (See example.)

4. On the reverse side of each card, provide an appropriate coded response. For instance, fo = foods, mo = money.


magnet tape
title card
felt strips of different colors

Sample Categories and Nouns.

mammals	foods	transportation	clothing	money	distractors
kinkajou	fricassee	caravan	cummerbund	peso	centenary
echidna	sorghum	rickshaw	spats	ruble	rouge
lemming	gingko	chariot	brogan	mark	zax
marmoset	frappe	sloop	choker	pence	cholera
tapir	artichoke	brigantine	mantelletta	franc	manse

Title: HOT STUFF/COLD STUFF

Comments: The purpose of this activity is to reinforce information regarding a unit of study on the deserts of the world. The content for almost any unit of study can be reviewed by allowing students to answer questions placed on die cut cards located toward the center of the board. Students move their game markers along spaces around the board's perimeter. Simply replace the die cut cards and the paperclipped chance factor cards with other sets of cards on a different topic.

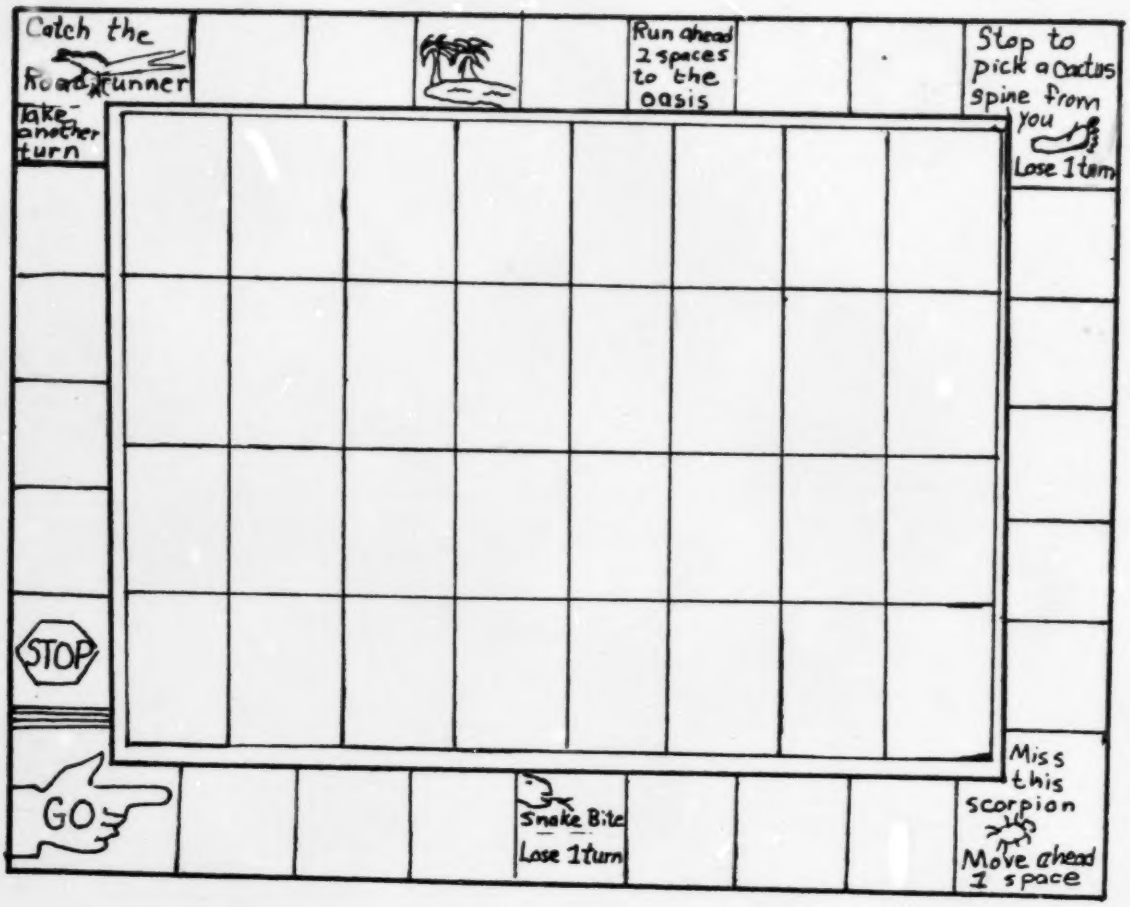
Several types of academic games such as "jeopardy," "concentration," or "climbing the ladder" could be created using this center section. Also, any activity requiring classifying or sequencing skills could be set to this design.

Sketch:

Description:

1. Sketch the following design on 28 X 22 matboard. Use a die cut card to draw the sections.

2. Create a series of questions that have correct answers. Number each one and write it onto a die cut card. Use a different color die cut card for each category of question. For instance, pink = "what" questions, yellow = "where" questions, and blue = "why" questions. For correct answers, allow students to move, 2, 3, or 4 spaces, respectively.


Catch the Road Runner
Run ahead 2 spaces to the oasis
Stop to pick a cactus spine from you
Lose 1 turn
Take another turn
STOP
GO
Snake Bite
Lose 1 turn
Miss this scorpion
Move ahead 1 space

3. Type the corresponding correct answers according to categories on a separate sheet of 8½ X 11 paper. On the reverse side of this answer key, type student directions for the game. Place this paper in clear acetate.

4. Create a set of chance factor cards to be paperclipped to the board. For instance, "Miss this scorpion. Move ahead one space."

Sample Questions and Answer Keys.

<u>What</u>

1.	A fruit that grows on a tree in the Sahara Desert is called a/an _____.	date
2.	A place with green vegetation in the desert where water is found is a/an _____.	oasis
3.	A desert animal with three stomaches is a/an _____.	camel
4.	Name a poisonous lizard found among the American deserts.	Gila Monster

<u>Where</u>

1.	Where is the largest desert in the Southern Hemisphere located?	Great Desert of Australia
2.	Death Valley is located in the _____ Desert.	Mojave
3.	Name the desert which has the coldest climate on earth.	Antarctic
4.	Name one European desert.	There is none. Europe has no deserts.

<u>Why</u>

1.	Why do desert dwellers tie the camel's knees together at night?	so they don't wander away
2.	Why is the Antarctic region considered to be a desert?	because it has less than 10" of precipitation per year
3.	Why are nomad homes very simple?	They must often move from place to place.
4.	Why are trees planted deeply in the desert soil?	so the roots can more easily reach water

Title: THE FLUME

Comments: The purpose of this activity is for students to correctly answer questions about modern energy issues. A teacher could just as easily reinforce knowledge about inventors or early explorers.

Students have gone agog over this design. True, the manner in which students receive immediate reinforcement is gimmicky, but it works. Why argue with success?

Sketch:

Description:

1. Obtain a cigar box and, as shown in the diagram, cut two ½" wide slots.

2. Cut two strips of aluminum or oaktag using the following dimensions: 2" wide by approximately 12½" long, and 2" wide by approximately 9½" long.

3. Place the strips in the box so as to form a chute. Bend the strip ends at least ½" around the upper and lower edges of the cut out slots. Fasten with a durable cement.

4. Cover the box with decorative contact paper.

5. Using oaktag or die cut cards, measure and cut a number of cards 3" by 1". Cards of greater dimension may not fit through the chute.

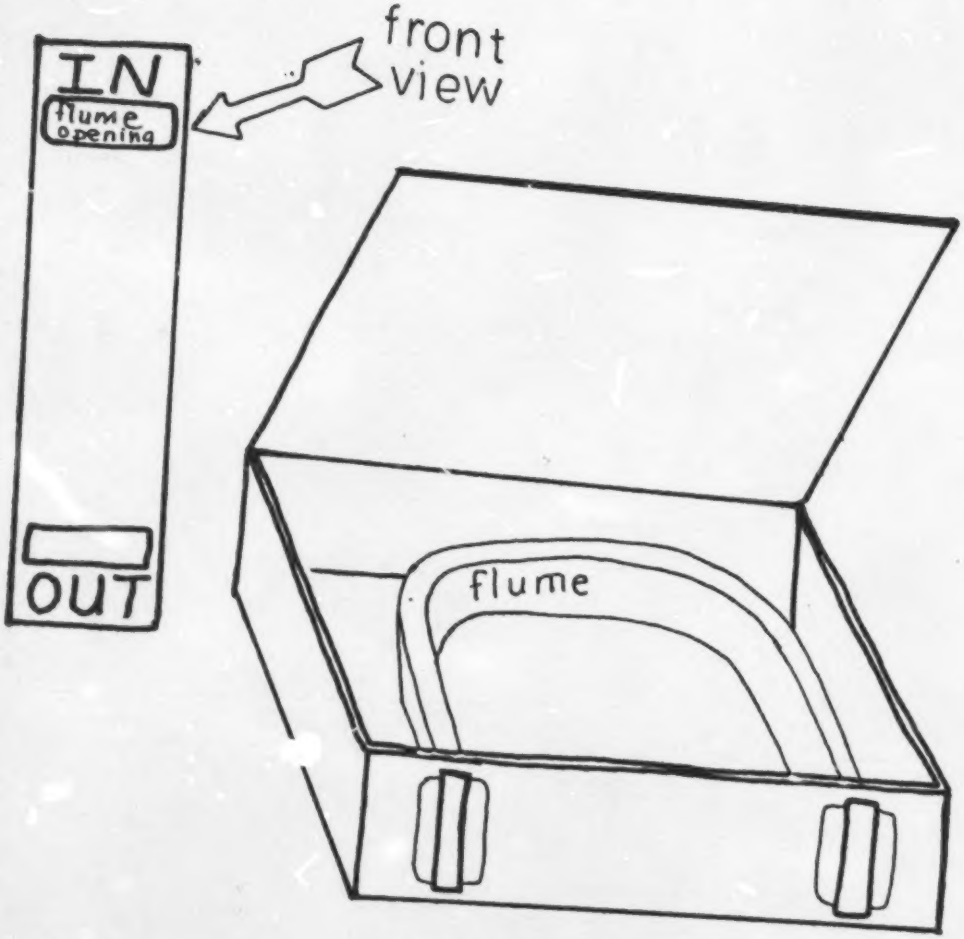
6. Write a question or phrase statement on each card. Also, put a red dot on each card. (Have students place the card in the upper slot with the red dot facing upward.)

7. Place an answer on the reverse side of each card.

NOTE: A milk carton is a good substitute. Decorate the carton and give it a "personality."

Sample Questions and Answer Key.

1. Name 3 fossil fuels.	coal, natural gas, and oil
2. Electricity can be created by fast moving water. This energy source is known as _____ _____.	hydroelectric power
3. Another energy source under the earth's surface in which water is heated is known as _____ _____.	geothermal energy


front
view
IN
flume
opening
OUT
flume

4. Changing plant material into energy is known as _____.	biomass
5. Name the system in which the design of the building provides for the collection, transfer, and storage of heat energy to air and water.	passive solar heating
6. Which is a cheaper energy source? nuclear, oil, or geothermal	geothermal

Title: MYSTERY LOCATION

Comments: The purpose of this activity is for students to identify and locate specific places in the United States with the aid of geographic clues. There are a multitude of topics that can be adapted to this design. Simply remove all material and insert another disc, answer cards, and answer key.

Sketch:

Description:

1. Write a geographic statement about certain places in the United States in each of the eight areas on the oaktag disc. (See sample questions.) Attach the disc to the board with a brad fastener.

2. Place eight pieces of adhesive magnet tape around the disc and number each one. (See sketch.)

3. On a set of cards, write a corresponding answer for each statement.

4. On the back of each answer card, attach a small piece of magnet tape or paper clip and write a letter.

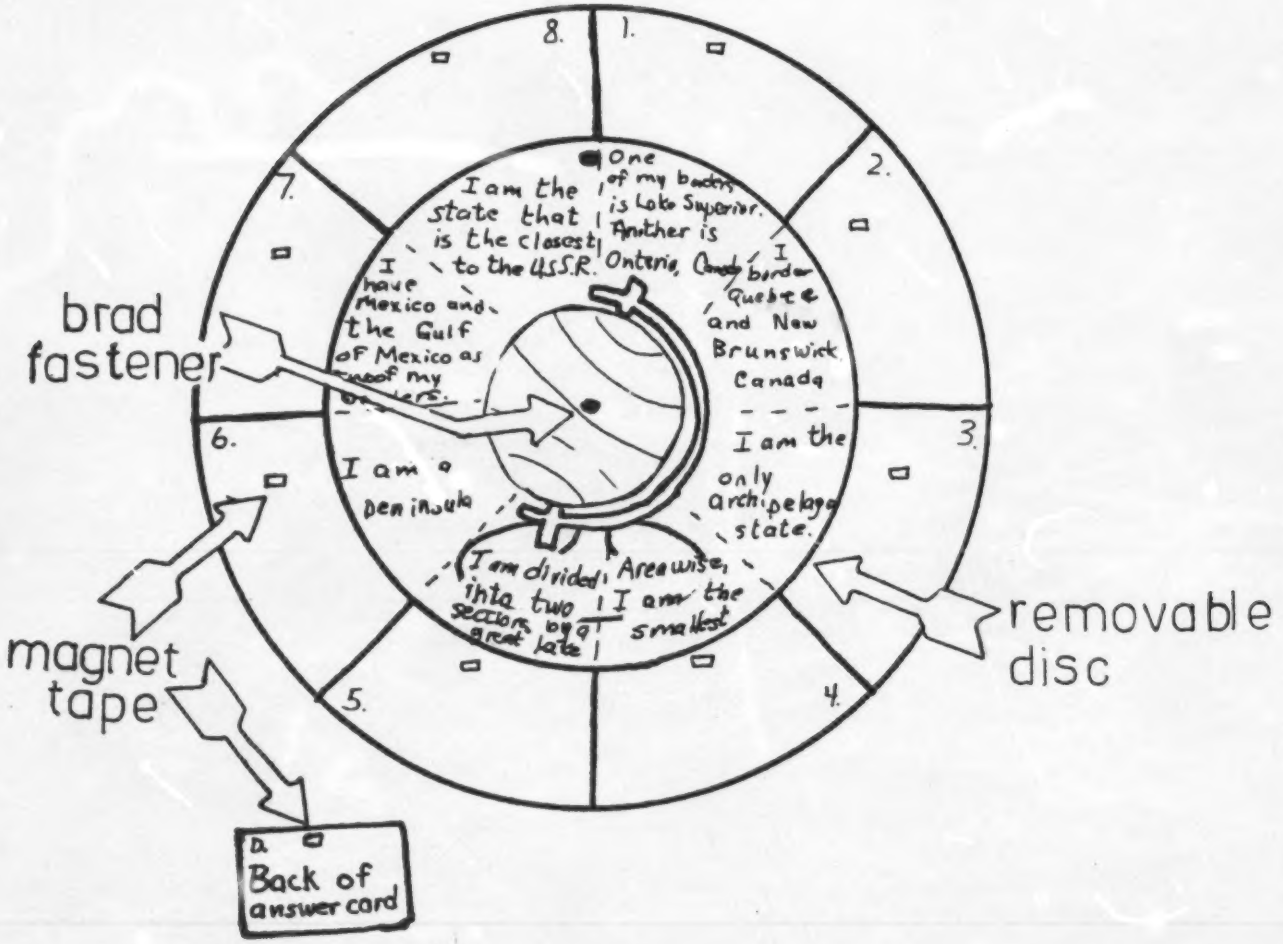
5. Provide a number/letter-coded answer key.

6. If needed, place an atlas, globe, or map at the activity.

Sample Statements and Answers.

Set One

1. I am divided into two sections by a Great Lake.	Michigan
2. I am a peninsula.	Florida
3. I have Mexico and the Gulf of Mexico as two of my borders.	Texas


8.
1.
2.
7.
3.
6.
5.
4.
One of my borders is Lake Superior. Another is Ontario, Canada
I am the state that is the closest to the U.S.S.R.
I have Mexico and the Gulf of Mexico as
I am a peninsula
I am the only archipelago state.
I am divided into two sections by a great lake
Area wise, I am the smallest
brad fastener
magnet tape
removable disc
Back of answer card

4.	I am the state that is closest to the U.S.S.R.	Alaska
5.	I am the only archipelago state.	Hawaii
6.	One of my borders is Lake Superior. Another border is Ontario, Canada.	Minnesota
7.	I border Quebec and New Brunswick, Canada.	Maine
8.	Area-wise, I am the smallest state.	Rhode Island

Set Two

1.	I am at 90° west longitude and 32° north latitude.	Mississippi
2.	I am at 76° west longitude and 40° north latitude.	Pennsylvania
3.	I am at 100° west longitude and 32° north latitude.	Texas
4.	I am at 115° west longitude and 40° north latitude.	Nevada
5.	I am at 156° west longitude and 64° north latitude.	Alaska
6.	I am at 100° west longitude and 48° north latitude.	North Dakota
7.	I am at 110° west longitude and 40° north latitude.	Utah
8.	I am at 68° west longitude and 46° north latitude.	Maine

Title: WORLD CRUISE

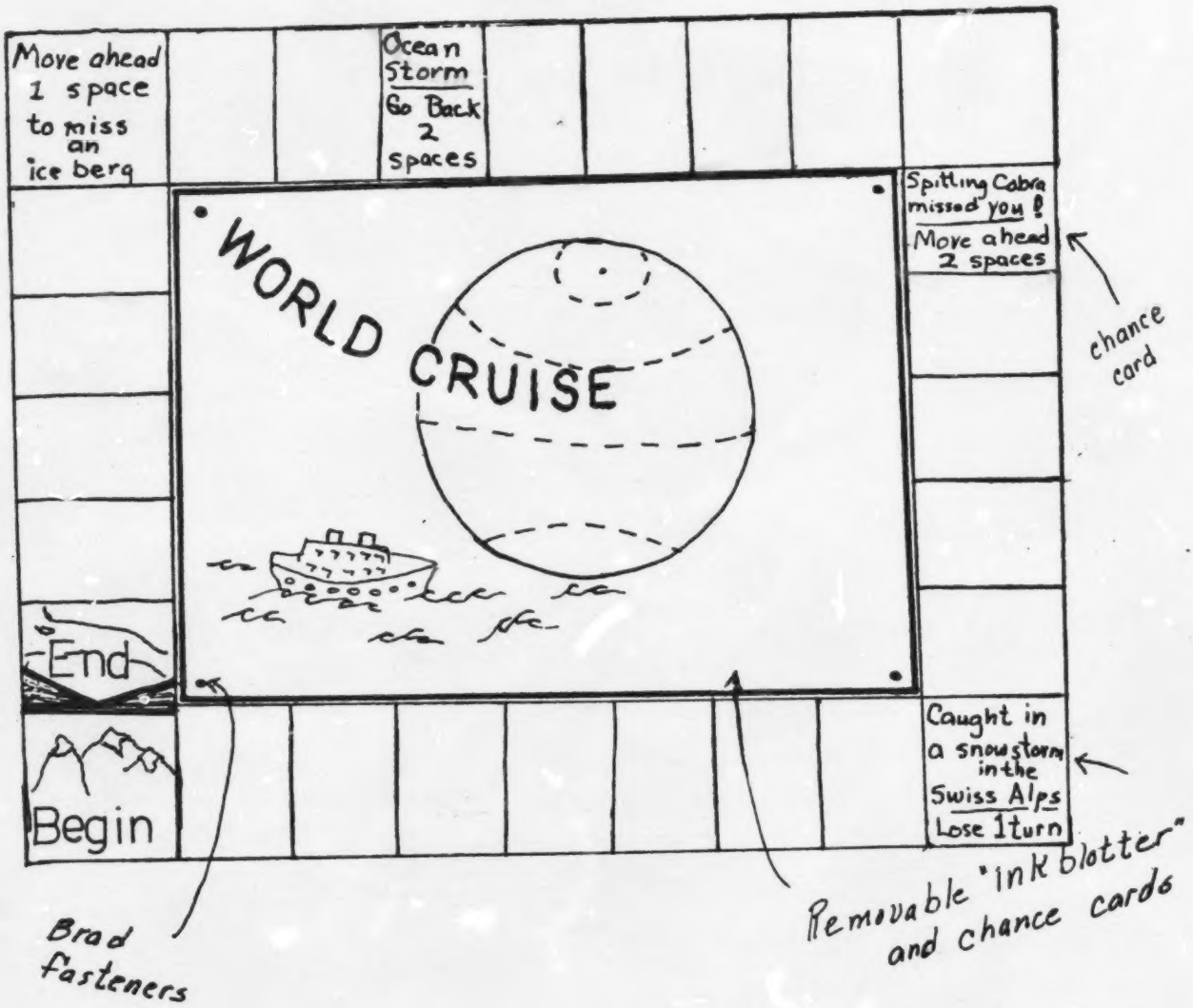
Comments: The purpose of this activity is to review information pertaining to geographic features and places on our earth. Any self-correcting academic game in which the teacher desires to reinforce a body of knowledge may be used with this design. For extra interest, have children make their own game markers.

Sketch:

Description:

1. Sketch the following gameboard design on a 28 X 22 piece of matboard.

2. To gain an "inkblotter" effect, place appropriate printed material such as a map or pictures on a separate piece of 20 X 14 matboard.


Move ahead 1 space to miss an ice berg
Ocean Storm
Go Back 2 spaces
Spitting Cobra missed you!
Move ahead 2 spaces
chance card
WORLD CRUISE
End
Begin
Caught in a snowstorm in the Swiss Alps
Lose 1 turn
Brad fasteners
Removable "ink blotter" and chance cards

3. On a selected topic, create a series of questions that have correct answers. Number each question and write onto die cut cards.

4. Place the corresponding correct answers on a separate sheet of 8½ X 11 paper. On the reverse side of this answer key, write student directions for the game. Place this paper in clear acetate.

5. Create a set of chance factor cards to be paperclipped to the board, i.e. - "You were caught in a snowstorm in the Swiss Alps. Lose one turn." or "Spitting Cobra missed you. Move ahead two spaces."

6. Display a world map for reference purposes.

7. When another topic is being studied, remove the "inkblotter" board, chance factor cards and questions and replace these items with appropriate material to be used with the same board design.

Sample Questions and Answer Key.

1. What island country is located to the southeast of Australia?	New Zealand
2. Name the archipelago country located to the northwest of Australia.	Indonesia
3. Name the body of water located east of the Central American countries.	Caribbean Sea
4. Which is not considered to be a country in Africa? (a) Egypt (b) Nigeria (c) Tanzania (d) Turkey (e) Chad	Turkey
5. Name the country with the northernmost capital city.	Iceland
6. Which country is not located on a peninsula? (a) Saudi Arabia (b) Spain (c) Algeria (d) Greece (e) Denmark	Algeria
7. Name the countries that lie south of the Antarctic Circle.	There is none.

---

[1]S. Thiagarajan and H. D. Stolovitch. "Frame Games: An Evaluation," Simulation and Games, 10, September 1979, 287-314.